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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,638	03/29/2001	Dan Martin Scott	09090.0003-01000	5708

22852 7590 03/13/2006

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EXAMINER	
AMINI, JAVID A	
ART UNIT	**PAPER NUMBER**
2672	

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/821,638	SCOTT ET AL.	
	Examiner	Art Unit	
	Javid A. Amini	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-8,13,14,16 and 19* is/are rejected.

7)☒ Claim(s) *9-12,17,18 and 20-22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/14/2005* 3/26/04/5/20/05
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/14/2005 has been entered.

Examiner's comments: Applicant's invention relates to a system and method for associating specific points on digital raster maps with a geographic coordinate system. On the other hand the Saylor as a primary reference creates a vector map, which is aligned with a raster map. The aligned maps provide an X, Y coordinate basis for the locating of specific addresses within the territory represented by the raster map.

Allowable Subject Matter

Claims 9-12, 17, 18 and 20-22 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
Claims 9, and 20-22 claim georeferencing uses three point pairs to complete the georeferencing function for the first map based on a linear transformation.
Claims 10-12, 17-18 claim using four point pairs to complete the georeferencing function for the first map based on a linear transformation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-8, 13-14, 16 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Saylor et al. U.S. Patent 5,487,139 (hereinafter, Saylor).

1. Claim 1,

As per claim 1, "the first map being a digital raster map, having a plurality of pixel locations, and the second map being a previously georeferenced map, having associated geographic coordinates, wherein the first map is similar to the second map, each pixel location includes an associated x-coordinate and y-coordinate" Saylor in col. 2 lines 26-47 discloses the limitations for generating method that include the steps of: obtaining a raster image of the existing map (Examiner's interpretation: meaning that there is a vector map i.e. equivalent to the second map of the claim invention, and the raster map is a digital map i.e. equivalent to the first map of the claim invention) providing a vector database having information characteristic to the territory represented by the rasterized map; displaying a vector map from the vector database, the displayed vector map containing information characteristic to the territory depicted in the rasterized map; substantially aligning corresponding areas of the raster map and the vector map; geocoding the object database information with X,Y coordinates relative to the vector database, at least some of the X,Y coordinates identifying locations of addresses within the territory depicted by the aligned raster and vector maps, also see fig. 2. Examiner's comment: a person

skill in the art would be recognizing the association between a pixel location with X and Y coordinates, because a display, see fig. 1 number 14 contains a plurality of pixel locations and each pixel location has a corresponding X, and Y values (i.e. point pair). Saylor in fig. 2 step 36 illustrates conversion for georeferencing points, e.g., LAT/LON into X, Y coordinate pairs, see the following claim language: "each geographic coordinate includes an associated longitude coordinate and an associated latitude coordinate". Saylor in fig. 2 boxes 34 and 30 illustrates two separate maps. Saylor in col. 3, lines 8-11 discloses at least some of the X,Y coordinates assigned to the object database information identify addresses within the territory depicted by the aligned raster and vector maps. As for claim invention claims: "receiving an entry identifying a first point pair, wherein a first pixel location on the first map is associated with a first geographic coordinate on the second map" Saylor in fig. 2 steps 32, 36 and 38 illustrates the conversion of LAT/LON to XY coordinate pairs to appropriate format with the digital raster map. By overlaying the digital raster map and the vector map, the claim limitations of "the first pixel location is located at a position on the first map analogous to the first geographic coordinate on the second map" may be very much analogous. *Id.,* it's obvious that each pixel location has a corresponding X, and Y values (i.e. point pair). Saylor in fig. 3 step 54 selects address, Examiner's interpretation: the selection of the addresses may be more than one address or a point i.e. corresponding to the X,Y coordinate point pairs, as Saylor in abstract teaches that the technique is particularly applicable to use by a utility company wherein the addresses identified are customer residences, each residence being coded with specific X,Y coordinates relative to the vector database. See this part of the claim invention: "receiving an entry identifying a second point pair, wherein a second pixel location on the first map is associated with a second geographic coordinate on the second map and the second pixel location is located at a position on the first map analogous to the second geographic

coordinate on the second map". Saylor at col. 3, lines 6-8, teaches that geocoding means are provided for assigning X,Y coordinates to the object database information using the vector database. That is analogous to the following part of the claim invention: "assigning to the first pixel location the longitude coordinate and the latitude coordinate associated with the first geographic coordinate; assigning to the second pixel location the longitude coordinate and the latitude coordinate associated with the second geographic coordinate". Saylor at cols. 3-4 lines 54-67 and 1-18 respectively, teaches that in fig. 1 workstation 12 is programmed with a commercially available computer aided drafting (CAD) geographical information system (GIS) package having raster/vector overlaying capabilities, such as InFoCAD marketed by Digital Matrix Services Inc. (DMS) of Miami, Fla. InFoCAD is designed to operate in a ini/mainframe environment and is available on multiple hardware platforms from DEC, Data General, IBM and Sun Microsystems. Saylor in fig. 2 steps 32, 36, 38 and 40 illustrates a mathematical function based on the points pair corresponding geographic coordinates to any one of pixel location, *id.*. That is analogous to the following claim language: "creating a mathematical georeferencing function, based on the first point pair and the second point pair, for assigning corresponding geographic coordinates to any one of the plurality of pixel locations". Saylor at col. 8, lines 10-12 teaches that certain modifications and changes therein may be affected by those skilled in the art. Examiner's interpretation regarding the following part of the claim: "revising the mathematical georeferencing function when a new point pair is received", the person skill in the art knows that every point in XY coordinate has a different value, therefore, the results of mathematical method that Saylor uses (is not a look-up table) for a new point pair are modified or revised.

Saylor is silenced explicitly to the claim language of identifying more than one point pair e.g., the point pairs that are not corresponding to each other. Saylor in fig. 2, box 38 illustrates overlay raster and vector images, when a person skill in the art marks a point in box 38, actually,

marking two maps i.e. considered more than one point pair, but the point pairs are corresponding to each other.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide for marking more than one point on the raster or vector maps, and Saylor teaches overlay two separate images (see fig. 2, steps 30, 34 and 38), while Applicant does not specify overlay images or occupying different area from each other. Since it has been held that providing more than one point where needed is obvious.

2. Claims 2-3, the step is obvious because Saylor in fig. 2, steps 30 and 34 illustrates the limitation.

3. As per claim 4, Saylor in fig. 2 step 36 converts the LAT/LON to XY coordinate pairs, meaning the point on the map has been determined. Saylor in col. 5, lines 20-26 teaches that a particular vector database, along with providing information on individual names and addresses, provides latitude/longitude identifiers for each vector.

4. As per claim 6, the step or the claim language of "a set of linear transformation" is obvious because, Saylor in fig. 2 box 36 converts Lat/Lon to X, Y coordinate pairs and this can be called linear transformation.

5. Claims 7-8 and 13, Saylor in fig. 2 step 38 illustrates synchronizing of the two maps; also see col. 3, lines 10-11.

6. Claim 14, the rejection of the claim 1 is similar to the rejection of the claim 14, because Saylor in fig. 2 step 36 illustrates that the function of XY coordinate points are equal to the function of LAT/LON points.

7. Claim 16, the rejection of the claim 8 is similar to the rejection of the claim 16.

8. Claim 19, the rejection of the claim 1 is similar to the rejection of the claim 19.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini